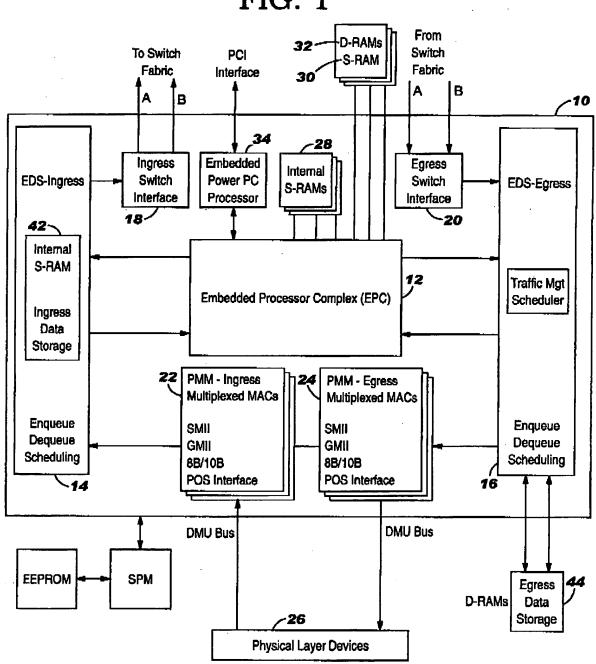
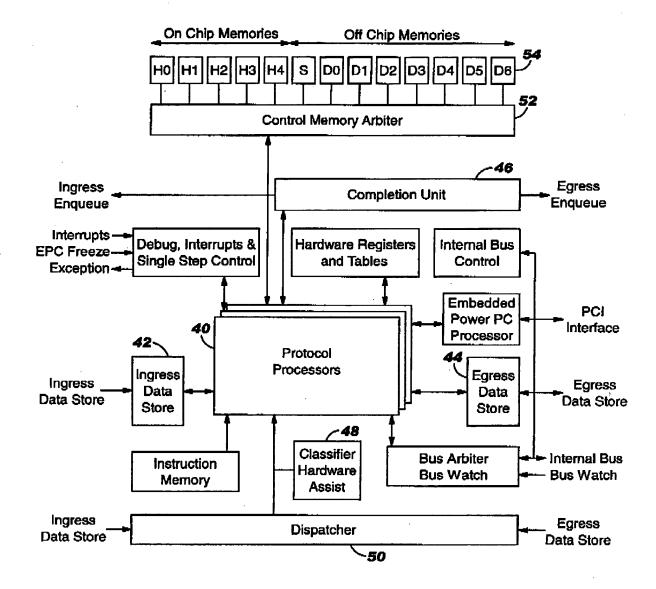
\$/N : 10/650397 FALB199901391/52 Full Metch (FM) Search Algorithm Implementation For A Network Processor B.M. Bass, et al.

1/12 FIG. 1



S/N: 10/650397 RAL919990139US2 Full Match (FM) Search Algorithm Implementation For A Network Processor B.M. Bass, et al.

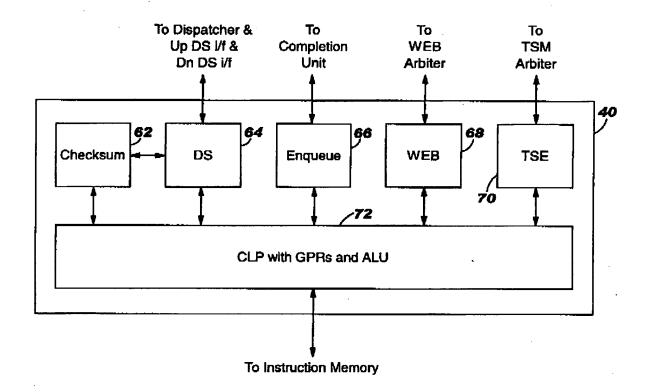
2/12 FIG. 2



S/N: 10/650397 RALE/19900138USE Full Match (FM) Search Algerithm Implementation For A Network Processor B.M. Bass, et al.

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FIG. 3

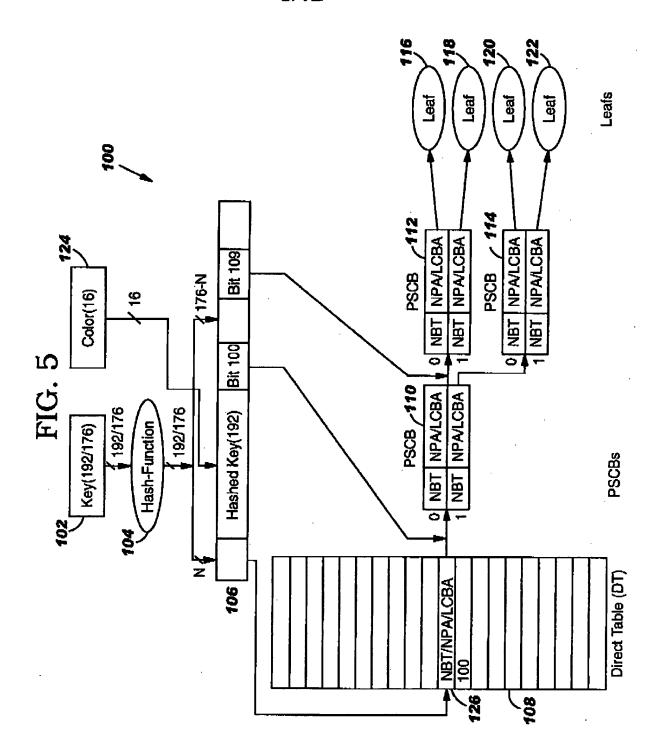


SAN: 10/850397 FAL919990139US2 Full Match (FM) Search Algorithm Implementation For A Network Processor B.M. Bass, et al.

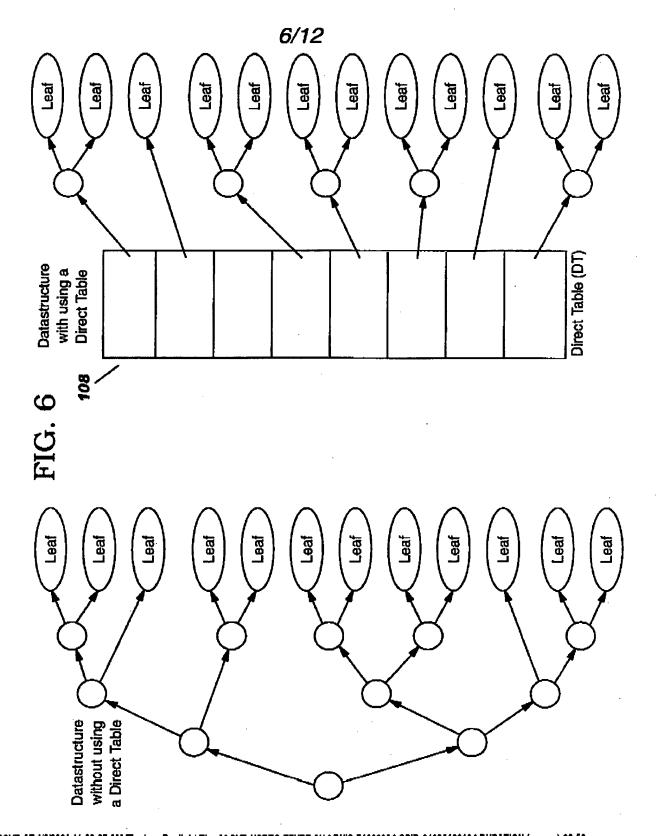
4/12 FIG. 4 Switch Fabric 18-20-**EDS-Egress** Ingress **Egress EDS-Ingress** Switch Switch Interface Interface: 80 -Buffer **Buffer QCB RCB** 78 40 **Protocol Processors** 22 -24 \ **PMM PMM** Ingress **Egress** Ingress **Egress** Data **Buffer** Buffer Data Storage Storage

S/N : F0/650397 RALB18980129UB2 Full Match (FM) Search Algorithm (Processor Pull Match (FM) Search Algorithm (Processor Pull Match (FM) Search (Processor Pull Match (Processor

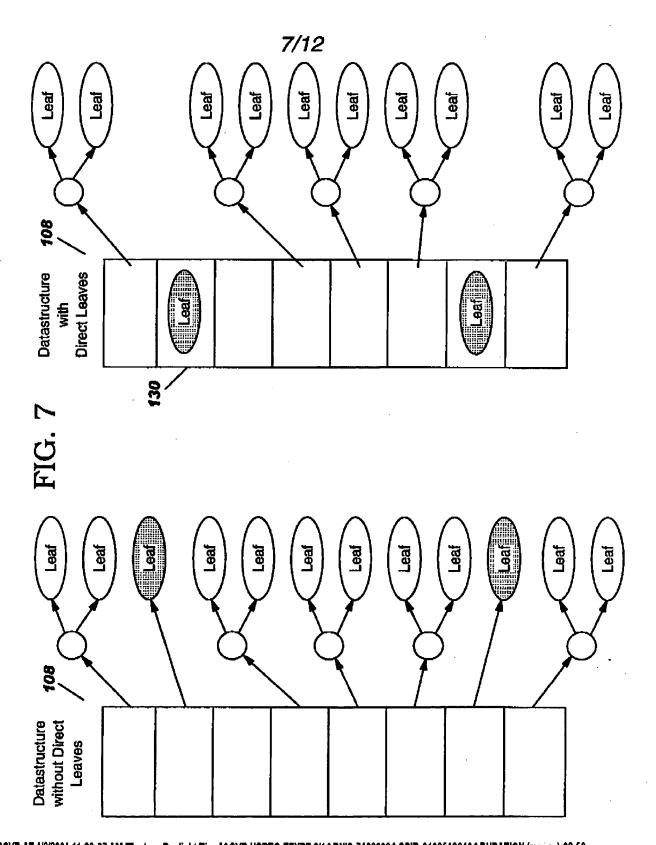
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SAN : 10/0507897 RAL919900135US2 Full Match (FM) Search Algorithm leiptamentation For A Nationit Processor B.M. Bass, et al.



G.N.:10/650397 RALIP19990138US2 Full Match (FM) Scanch Algorithm Implementation For A Network Processor B.M. Bass, et al.



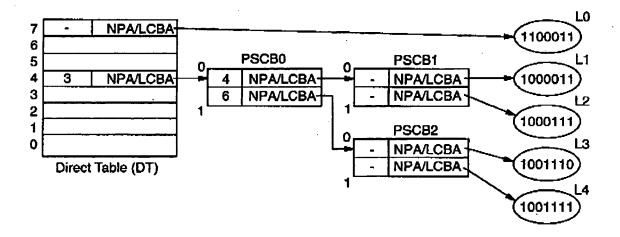
S/N: 10/850397 RAL919990139US2 Full Malch (FM) Sourch Algorithm Implamentation For A Network Processor

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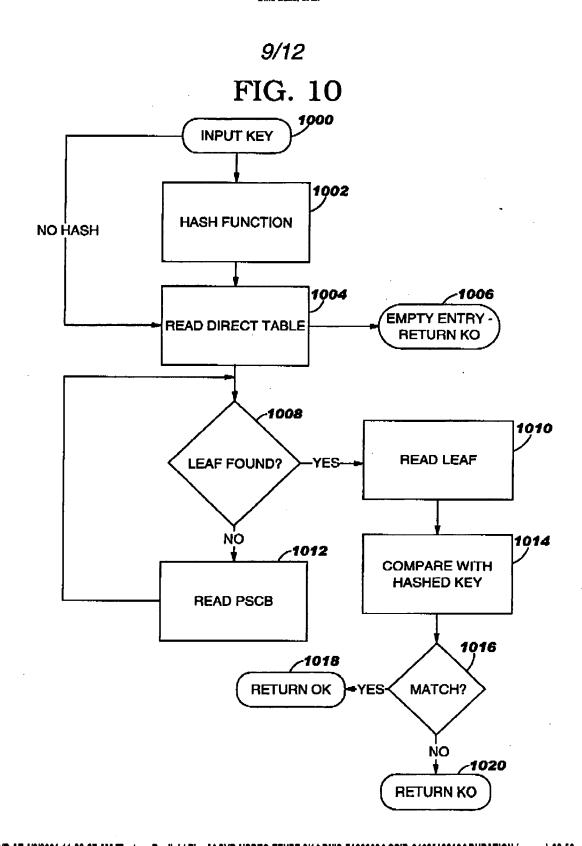
FIG. 8

Format	Conditions		Valid in PSCB?		NPA/LCBA (26 bits)	NBT (8 bits)
Empty DTEntry	No leaves	Yes	No	00	0	0
Pointer to next PSCB	DtEntry contains pointer	Yes	Yes	00	NPA	NBT
Pointer to leaf Single leaf associated with DTEntry; LCBA field contains pointer		Yes	Yes	01	LCBA	0

FIG. 9



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FIG. 11

LUDefTable Tree Definition

Field	Size	Bits
CacheEntry	1	0
Tree_Type	2	21
hash-type	4	63
color_en	1	7
P1P2_max_size	5	128
NPARope_en	1	13
NPASMT en	11	14
Complindex_en	11	15
PSCB fa index	6	2116
PSCB Height	1	22
Mask Vector En	1	23
Complindex	8	3124
DT_base_addr	26	5732
DT_size	4	6158
DT interleaf	2	6362
Leaf_fq_index	6	6964
Leaf Width	2	7170
Leaf Height	3	7472
DirectLeafEn	1	75

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FIG. 12

Field	Size	Address in TSM where PSCB is located
NPA0	26	Next PSCB address: pointer to next PSCB in the tree for 0-part of PSCB
NBTO	8	Next bit to test for 0-part of PSCB
LCBA0	26	Leaf control block address: pointer to leaf for 0-part of PSCB
NPA1	26	Next PSCB address: pointer to next PSCB in the tree for 1-part of PSCB
NBT1	8	Next bit to test for 1-part of PSCB
LCBA1	26	Leaf control block addess: pointer to leaf for 1-part of PSCB
Index	8	Index of this PSCB (physically stored in the previous PSCB)
PatBit	1	The value of HashedKey[Index], based on the value of the Index field in the PSCB register

FIG. 13

Field Name	Length	Description
NLARope	4 bytes	Leaf chaining pointer, aging information and direct leaf information
Prefix_Len	1 byte	This field is not used by the TSE for FM trees and can be used by picocode
pattern	2 - 18 bytes	Pattern to be compared with the HashedKey
UserData	variable	The contents of this field is under complete picocode control; the UserData field can include one or more counters

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FIG. 14 12/12

